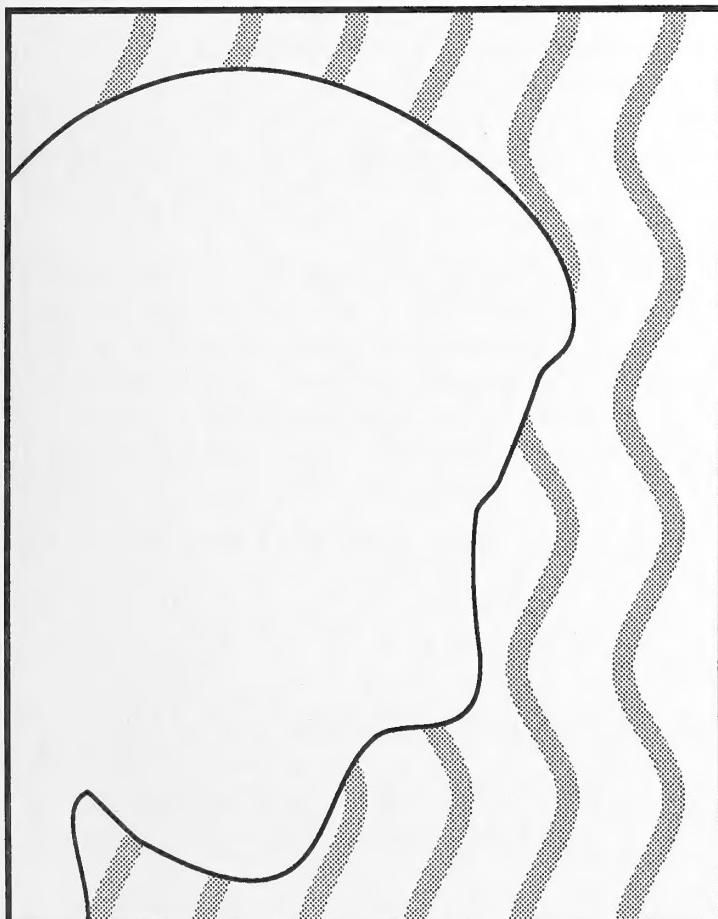


Alcohol, Tobacco, and Other Drugs Resource Guide

Drug-Free by the Year 2000

INHALANTS



Office of Minority Health
Resource Center
PO Box 37337
Washington, DC 20013-7337

March 1994

Prevention Material	1
Studies, Articles, & Reports	5
Groups, Organizations, & Programs	13

From the Acting Director of CSAP...

The number of children using inhalants has nearly doubled in the last 10 years. Youth are using regular household, office, and classroom products to get high, and many are suffering the damaging effects to the heart, kidney, liver, and brain. Some are even dying from this dangerously popular craze.

We at CSAP want to change this and prevent even one more child from misusing these products. This resource guide is one step in our prevention venture and we want you—teachers, parents, community leaders—to join us in this undertaking. Together we can stamp out inhalant and other drug problems and together we can prove again that Prevention Works!

Vivian L. Smith, M.S.W.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Substance Abuse and Mental Health Services Administration



The listing of materials or programs in this resource guide does not constitute or imply endorsement by the Center for Substance Abuse Prevention, the Public Health Service, or the Department of Health and Human Services. The materials have been reviewed for accuracy, appropriateness, and conformance with public health principles.

This Alcohol, Tobacco, and Other Drugs Resource Guide was compiled from a variety of publications and data bases and represents the most current information to date. It is not an all-inclusive listing of materials on this topic. This guide will be updated regularly, and your comments or suggestions are welcome. To suggest information or materials that might be included in updated editions, please write to the **National Clearinghouse for Alcohol and Drug Information (NCADI), P.O. Box 2345, Rockville, MD 20847-2345.**

Produced by the National Clearinghouse for Alcohol and Drug Information, Karen Zuckerman, editor.

For further information on alcohol, tobacco, and other drugs, call 1-800-729-6686, 301-468-2600, or TDD 1-800-487-4889.



Please feel free to be a "copy cat," and make all the copies you want. You have our permission!



Prevention Material on Inhalants

Inhalant Prevention

Format: Brochure

Length: 8 Pages

Topic: Inhalant Use Prevention

Target Audience: Parents

Setting: Home

Readability: Fairly Difficult

Availability: Drug Prevention Resources,
5525 MacArthur Blvd., Suite 450, Irving, TX
75038; 214-518-1821

This brochure defines inhalants as "home poisons" and explains the dangers of using them. The brochure provides symptoms of inhalant use and lists four main reasons why youth begin sniffing. Parents are advised to maintain close supervision of children, watch for signs of use, and read labels of household products as ways to prevent inhalant use by their children.

Inhalants: The Tricky Drugs

Year: 1992

Format: VHS Video

Length: 7 Minutes

Topic: Inhalant Use Prevention

Target Audience: Elementary and Jr. High Youth

Setting: School and Community Organization

Availability: Syndistar, Inc., 125 Mallard Street, Suite A, St. Rose, LA 70087-9471; 1-800-841-9532

Hosted by two teenagers, this video teaches young people about the dangers of using inhalants. It explains the signs

and effects of inhalant use and portrays convincing ways of resisting peer pressure. The video is designed to enhance self-esteem and advises youth to turn to a trusted friend for support and guidance instead of turning to drugs.

Inhalants

Year: 1989

Format: Fact Sheet

Length: 1 Page

Topic: Inhalant Use Prevention

Target Audience: General Public

Setting: Home

Readability: Fairly Difficult

Availability: Michigan Substance Abuse & Traffic Safety Information Center, 2409 E. Michigan Avenue, Lansing, MI 48912; 517-482-9902

This fact sheet answers questions about inhalants and conveys the risks of sniffing. It states that inhalants can cause bone marrow damage, drastic weight loss, impairment of memory, and even sudden death. The fact sheet explains that because inhalants are readily available and inexpensive, they are most often used by youth between the ages of 7 and 17.

Just the Facts...Inhalants

Year: 1990

Format: Fact Sheet

Length: 2 Pages

Topic: Inhalants

Target Audience: AOD Prevention Professionals, Employees, and General Public

Setting: School and Worksite

Readability: Easy

Availability: Florida Alcohol & Drug Abuse Association, 1030 E. Lafayette Street, Suite 100, Tallahassee, FL 32301-4559; 904-878-2196

This fact sheet looks at the different types of inhalants, the signs and symptoms of inhalant use, the patterns of inhalant use, how inhalants affect the body, and how tolerance develops. It warns that inhalants are often used with alcohol and marijuana and may indicate a high level of drug involvement. The fact sheet looks at special at-risk populations including teenagers, pregnant women, and certain ethnic groups.

Inhalants: Mind-Altering Drugs Series

Year: 1991

Format: Booklet

Length: 13 Pages

Topic: Inhalants

Target Audience: General Public, High-Risk Youth, and Young Adults

Setting: Community Organizations and Schools

Readability: Fairly Difficult

Availability: Wisconsin Clearinghouse, P.O. Box 1468, Madison, WI 53701-1468; 1-800-322-1468

This booklet provides a thorough summary of facts and statistics on inhalant use. It lists street names, short- and long-term effects, and reasons why people begin to use inhalants. Special hazards, such as inhalants and driving, inhalants and pregnancy, and inhalants and AIDS are discussed.

Inhalants: The Quick, Deadly High

Format: Booklet

Length: 15 Pages

Topic: Inhalants

Target Audience: Educators, Jr. High Youth, and Parents

Setting: Home and School

Readability: Fairly Difficult

Availability: Health Edco WRS Group, Inc., P.O. Box 21207, Waco, TX 76702-1207; 1-800-299-3366

Colorfully illustrated with cartoon sketches, this brochure discusses the problem of inhalant use and lists several common inhalants that can be found around the home. The brochure also looks at the use of such inhalants as nitrous oxide, freon, butyl nitrite, and amyl nitrite. Commonly asked questions about inhalants are answered and suggestions on how to reduce the demand for abused substances are offered.

Inhalants: Sniffing Your Way to Addiction

Year: 1991

Format: VHS Video

Length: 16 Minutes, 30 Seconds

Topic: Inhalants

Target Audience: Jr. High and Sr. High Youth and Young Adults

Setting: Community and Health Care Organizations

Availability: Altshul Group, Visions Video Production, Inc., 1560 Sherman Avenue, Suite 100, Evanston, IL 60201; 703-328-6700, 1-800-323-9084

For many drug users under 16 years of age, inhalants are the drug of choice. This video focuses on inhalant use among youth and stresses that the use of inhalants can lead to other drug use,

addiction, and death, including a syndrome known as Sudden Sniffing Death (SDD). The video notes symptoms of use, effects of use on the body, and suggestions on what to do if a friend is using inhalable substances.

Amyl/Butyl Nitrite & Nitrous Oxide: The Sour Smell of Excess

Year: 1990

Format: Brochure

Length: 8 Pages

Topic: Inhalants

Target Audience: Sr. High Youth

Setting: School

Readability: Easy

Availability: Do It Now Foundation, 6423 South Ash Avenue, Tempe, AZ 85283; 602-491-0393

This brochure provides detailed information about amyl/butyl nitrite and nitrous oxide. It includes a brief history of inhalant use and lists several short and long-term effects of use. The brochure states that while many people mistakenly believe these substances are "a lot of laughs," in reality, sniffing is anything but funny.

A Wasted Breath: Kids on Inhalants

Year: 1992

Format: VHS Video

Length: 19 Minutes

Topic: Inhalant Use Prevention

Target Audience: Hispanics/Latinos, Jr. High Youth, and Educators

Setting: School and Community Organizations

Availability: Media Projects, Inc., 5215 Homer Street, Dallas, TX 75206; 214-826-3863

Recovering teenagers in this video tell viewers about the devastating effects inhalants had on their lives. The video features children of diverse ethnic/racial backgrounds and shows a classroom instructor advising students how to resist peer pressure. The video urges children to talk to a parent, teacher, or school counselor if they suspect a friend is using drugs, and children themselves warn, "Don't start, it's not worth it!"

Inhalants and Their Effects

Year: 1992

Format: Booklet

Length: 13 Pages

Topic: Inhalant Use Prevention

Target Audience: General Public, Sr. High and Jr. High Youth

Setting: School

Readability: Average

Availability: Life Skills Education, 226 Libbey Parkway, Weymouth, MA 02189; 1-800-783-6743

This booklet explains how inhalants affect the brain and other parts of the body. It states that long-term inhalant users are at an increased risk for cancer, and that youth are particularly vulnerable to the dangers of inhalants. The booklet looks at reasons why people may begin using inhalants and urges teenagers and young adults who are currently using inhalants to seek counseling for help.

Inhalants-What You Should Know: Inhalant Abuse-Kids In Danger

Year: 1992

Format: Brochure

Length: 6 Pages

Topic: Inhalant Use Prevention

Target Audience: General Public, Parents, and Sr. High Youth

Setting: Schools and Community Organizations

Readability: Fairly Difficult

Availability: National Federation of Parents for Drug Free Youth, 11159-B South Towne Square, St. Louis, MO 63123-7824; 314-845-1933

This brochure discusses the dangers of inhalant use, or sniffing, and mentions several household items that can be misused to get "high." The brochure looks at the short-term and long-term effects of sniffing and lists several potential signs of inhalant use, such as disappearing plastic bags, strong odors, and paint or glue on the face or clothing.

All About Sniffing/Todo Sobre Inhalantes

Year: 1990

Format: Brochure

Length: 6 Pages

Topic: Inhalant Use Prevention

Target Audience: Jr. High and Sr. High Youth

Setting: Schools and Health Care

Language: English/Spanish

Readability: Average

Availability: DIN Publications, 6423 South Ash Avenue, Tempe, AZ 85283; 602-491-0393

Available in both Spanish and English, this brochure provides information to young people about the dangers of inhalants. It discusses the different types of inhalants, facts and effects of in-

halants, and reasons why kids may foolishly begin to sniff inhalants. The brochure states that inhalants are some of the "bad smells" in the world and urges youth to stay drug-free.

Tips for Teens About Inhalants

Organization: Center for Substance Abuse Prevention

Year: 1993

Format: Brochure

Length: 2 Pages

Topic: Inhalants

Target Audience: Jr. High and Sr. High Youth

Setting: Schools and Community Organizations

Readability: Easy

Inventory No.: PHD631

Availability: Free; CSAP's National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20847-2345; 1-800-729-6686

This colorful trifold brochure contains facts and resources on inhalants. Designed to attract attention and concern, the brochure states that inhalants can be deadly. Teens are advised to stay away from all drugs and urges them to seek help from a counselor, friend, or parent whenever necessary.

Studies, Articles, & Reports on Inhalants

Government Publications and Journal Articles

Inhalant Abuse: A Volatile Research Agenda. NIDA Research Monograph Number 129

Washington, DC: U.S. Government Printing Office, 1992

(Available from CSAP's National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20847-2345, 1-800-729-6686.)

In the fall of 1989, the University of Texas, Health Sciences Center, and the Texas Commission on Alcohol and Drug Abuse convened a meeting to review the state of knowledge on inhalant use and stimulate inquiry into aspects of this complex problem. During this meeting it became obvious that, unlike other areas of drug abuse research, no cohesive group of investigators has directly addressed research or treatment of inhalant use. The lack of cohesion of inquiry into solvent use may result, in part, from both the unusual patterns shown by the abusers and the nature of the substances themselves. Many dimensions that differentiate inhalant users from other drug abusers are described in this volume. Not only does this group use an enormous array of substances, the individuals them-

selves are a complex cross-section of many sociocultural and psychological dimensions. Many exhibit particularly dysfunctional behavior patterns, making them especially resistant to treatment. While volatile solvent users share many characteristics with other drug users, enough differences exist to make many researchers and treatment personnel reluctant to become involved with these populations and their behavior. The format of the conference focused on broad fields of endeavor. Each section was introduced by a review of the state of knowledge in a particular area followed by discussions and relevant short papers.

Nitrite Inhalants: Patterns of Abuse in Baltimore and Washington, D.C.

Lange, W. R.; Haertzen, C. A.; Hickey, J. E.; Snyder, F. R.; Dax, E. M.; and Jaffe, J. H.

American Journal of Drug and Alcohol Abuse 14(1):29-39, 1988

(Available from W. Robert Lange, MD, MPH, Addiction Research Center, National Institute on Drug Abuse, P.O. Box 5180, Baltimore, MD 21224.)

Nitrite inhalants, as drugs of abuse, have received a new prominence in the literature since their use has been associated with Kaposi's Sarcoma and possibly other manifestations of AIDS. Changes in patterns and prevalence of

use have not been investigated since the onset of the AIDS epidemic. Researchers have examined the use patterns of nitrite inhalants (poppers) in several different groups. The use of poppers among drug abusers in the Baltimore-Washington, DC, metropolitan area has remained constant over the past 5 years, with the prevalence of use being approximately 11 percent for occasional drug users and 22 percent for heavy users. Self-reported use by a homosexual group had decreased over the same period. Sixty-nine percent of the homosexual sample had experience with nitrites, but only 21 percent had used them in the 6 months before being surveyed. The mean interval since last use was 25 months, and since peak use, 4.1 years. Among substance abusers, nitrites appear to be a drug whose use starts late, with the mean age of first use being 25.6 years compared to 14.6 years for glue, 17.6 years for marijuana, and 18.5 years for heroin. Researchers found both heterosexual and homosexual groups use nitrites primarily to "get high," but homosexuals more often use them during overt sexual activity. Experience with amyl nitrite was much more prevalent than with the butyl derivative in both populations. It is concluded that the prevalence of nitrite abuse among drug users has not changed because of the AIDS epidemic, but such use appears to have decreased within the homosexual community.

Epidemiology of Inhalant Abuse: Update. NIDA Research Monograph No. 85

Crider, R. A., and Rouse, B. A. (Eds.)

Washington, DC: U.S. Government Printing Office, 1988

(Available from CSAP's National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20847.)

The problem of inhalant use is highlighted. The populations at risk are identified. Various approaches for control, prevention, and intervention of inhalant use are discussed. Inhalant abuse is increasing both in the United States and in neighboring countries. Prevalence appears to differ greatly by subgroups. Inhalant abusers can be grouped into three categories: (1) inhalant-dependent adults; (2) polydrug users; and (3) young inhalant users.

Nitrous Oxide Mood Disorder

Grigg, J. R.

Journal of Psychoactive Drugs: A Multidisciplinary Forum 20(4):449-450, 1988
(Available from LCDR Jon R. Grigg, MC, USNR, Department of Psychiatry, Sewells Point Branch Medical Clinic, Naval Station, Norfolk, VA 23511.)

This case report examines a patient who acutely used excessive amounts of N₂O and presented with symptoms of a severe mood disorder without any of the usually reported symptoms. A computer search of the literature revealed no reports in which an acute N₂O user presented with a severe mood disorder as the sole symptom complex. This case report is intended to introduce clinicians working in the field of substance abuse to this newly described disorder. The patient's diagnosis, Nitrous Oxide Mood Disorder, conforms to DSM-III-R (American Psychiatric Association 1987) nomenclature for the diagnostic category "Other Psychoactive Substance-Induced Mood Disorder."

Nitrite Inhalants: Promising and Discouraging News

Lange, W. R., and Fralich, J.

British Journal of Addiction 84(2):121-123,
1989

(Available from W. Robert Lange, Addiction Research Center, National Institute on Drug Abuse, P.O. Box 5180, Baltimore, MD 21224.)

A growing body of evidence suggests that nitrites may play an important role in the pathogenesis of human immunodeficiency virus (HIV) infection. The inhalation of volatile nitrite vapors produces diffuse relaxation of smooth muscle, thereby causing an intense vasodilation with flushing, a fall in blood pressure, and a reflex tachycardia. Two distinct, high-risk groups were surveyed about their use of nitrites. Homosexual men reported an appreciable decline in nitrite inhalant use, while substance abusers (predominantly a heterosexual group) showed not much change in nitrite inhalant use for the years studied (1981-1986). One other study found that nitrite inhalation induces change in the immune system by initially suppressing immune function and later following with a period of non-specific stimulation.

Inhalant-Related Medical Emergencies Highest in Southwest

ADAMHA News May 1989, p. 13

(Available from CSAP's National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20847-2345)

Three of the four metropolitan areas with the highest number of inhalant-related emergency room episodes have

been in the Southwestern United States, according to NIDA's Drug Abuse Warning Network (DAWN). Hispanics accounted for 22 percent of the emergency room episodes in which inhalants were reported, a significant overrepresentation of that ethnic group compared with their numbers in the total population. The DAWN data may not reflect the full magnitude of medical problems related to inhalant use, and inhalants may contribute to more deaths than are reported in the medical examiner data. Most inhalants cannot be detected through metabolites in tissue or blood and are never identified in autopsies or toxicological examinations. Long-term effects of inhalants can be insidious and often do not precipitate a medical emergency or death. For this reason, chronic abusers may experience health problems related to inhalant use but never enter the emergency room or end up on the medical examiner's autopsy table. Data for these cases, therefore, would not show up in DAWN.

Inhalant Abuse among Native Americans "Alarming"

Penman, S.

ADAMHA News March/April 1990, pp. 6-7

(Available from CSAP's National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20847-2345)

American Indian children under age 10 are sniffing paint, gasoline, aerosol sprays, and model glue at an alarming rate. Sometimes, entire families spanning three generations are buying and sniffing paint by the case. Inhalant users are invariably ostracized by the community. Inhaling solvents has serious physical and psychological repercussions. In-

halant use may result in thought dysfunction, irreversible brain damage, and coma. Other serious effects include leukemia, liver damage, hearing loss, kidney dysfunction, and permanent paralysis. Recovery from the physical effects of inhalant use can take from 6 to 12 months. Most treatment programs are not equipped to deal with such a long withdrawal and recovery period. Adolescents generally use inhalants within the context of their peer groups. Therefore, it is necessary to treat the entire peer cluster, not just the individual. Detoxification centers have become concerned about the increase in the number of inhalant users being readmitted for continued inhalant use.

Relative Addiction Potential of Major Centrally Active Drugs and Drug Classes: Inhalants and Anesthetics

Pollard, T. G.

Advances in Alcohol and Substance Abuse
9(1/2):149-165, 1990

(Available from Trevor G. Pollard,
Department of Anesthesiology, University
of Texas Health Science Center, 7703
Floyd Curl Drive, San Antonio, TX
78284-7838.)

Inhaling a variety of substances for recreational purposes is a health problem of worldwide proportions. The inhalation of non-narcotic agents, such as volatile inhalants (e.g., solvents and glues), anesthetics and nitrites, adds significantly to the growing number of substance abusers. This is of particular concern because it affects the younger members of the population, and the substances abused are, for the most part, legally obtainable. The toxicity of these

inhaled substances is reviewed and compared, as is their potential for addiction and dependence.

Other Publications

Inhalant Use Among American Indian Youth

Young, T. J.

Child Psychiatry and Human Development
18(1):36-46, 1987

(Available from Thomas J. Young, Ph.D.,
Bureau of Child Research, Department of
Human Development, Haworth Hall,
University of Kansas, Lawrence, KS
66045-2930.)

According to the U.S. Indian Health Service, substance abuse is the most urgent health problem facing American Indians. Inhalants are among the first drugs used by Indian youth, with first use occurring at approximately the same time as the onset for cigarette smoking. Although prevalence rates vary among Indian subpopulations, Indian youth generally have much higher rates of inhalant use than non-Indian youth. Furthermore, while other drugs are showing a downward trend among Indian youth, inhalant use is increasing slightly. This paper examines this phenomena by reviewing related epidemiological, social, and clinical issues.

Inhalants: Toxic Fumes

Glowa, J. R.

New York: Chelsea House Publishers, 1986
(Available from Chelsea House Publishers,
95 Madison Avenue, New York, NY 10016.)

Inhalants such as gasoline, cleaning fluids and paint thinners, which are just a few of the household and commercial products that young people inhale, are discussed. Approximately 15 percent of high school students have used inhalants, and use is especially increasing among young girls. Inhalants can cause damage to the heart, kidneys, and liver and can cause stupor and brain damage. The history, chemistry, and pharmacology of solvents are examined, and the behavioral and physiological effects of inhalants are discussed.

Inhalant Abuse Still a Problem

Miller, M.

Chemical People Newsletter July/August 1990
(Available from The Chemical People, 4802 Fifth Avenue, Pittsburgh, PA 15213.)

Inhalant use is discussed. More than 500 products have been used for their psychoactive effects. These include: nail polish, spray paint, rubber cement, spray cooking oil, lighter fluid, hair spray, shoe polish, felt tip markers, typewriter correction fluid, model glue, and gasoline. Today, the predominant age groups using inhalants are middle school and upper elementary age children. Inhalant use is also occurring in large numbers in minority communities, especially those high populations of American Indians or Hispanics. Signs of inhalant use include: staggering; ag-

gressive or hostile behavior; coughing; nausea; nose bleeds; bad breath; and odors of chemicals on clothing.

Barrio Inhalant Abuse Model: Clinical Typologies and Program Strategies

Jasso, R.

Conference Paper, November 7, 1989
(Available from Ricardo Jasso, Southwest Associates, 1306 West Commerce, San Antonio, TX 78207.)

The Barrio Inhalant Model acknowledges that Chicano adolescent inhalant users are bicultural and assumes that language and culture play a significant role in the diagnosis, treatment, and prevention of inhalant use. The author contends that Chicanos do not participate and fully benefit in Anglo-oriented substance abuse programs. Besides, traditional prevention and treatment approaches are ineffective and do not deter barrio children and adolescents from using and abusing inhalants. The Barrio Inhalant Abuse Model presents a more precise typology of inhalant use: experimental, recreational, habitual, chronic, and dependent. The social characteristics of each typology are outlined. This model uses several intervention and treatment strategies, each conducted in a community-based setting. These program strategies are described, specific to the typology of inhalant use. It is suggested that this model could be modified for use in the Native American community, which also has a high degree of inhalant use.

Understanding Inhalant Users: An Overview for Parents, Educators, and Clinicians

Lettieri, D.

Report, Texas Commission on Alcohol and Drug Abuse, 1991

(Available from the Texas Commission on Alcohol and Drug Abuse, 720 Brazos, Suite 403, Austin, TX 78701.)

This report represents the proceedings of the Inhalant Abuse Research Symposium sponsored by the Texas Commission on Alcohol and Drug Abuse and the University of Texas Health Science Center in June of 1990. The purpose of this report is to summarize and interpret various areas of research related to inhalants and to provide general guidance dealing with this complex and urgent problem. Sections discuss: characteristics of inhalants, including chemicals found in inhalants and common modes of administration; defining inhalant use and abuse, including observed and perceived drug effects and chemical categories; classifying the inhalant user; causes and consequences of inhalant use, including origins of substance abuse, reasons for use, adolescent rebellion, behavioral cues, and mortality; effects of inhalant use; trends in inhalant prevalence; treatment of inhalant users, including screening and diagnosis, family treatment, and a perspective for counselors; prevention of inhalant use; research in inhalant use; and a summary of inhalant issues.

Inhalant Use by Mexican American Youth: Introduction

Simpson, D. D.; Joe, G. W.; and Barrett, M. E.

Hispanic Journal of Behavioral Sciences
13(3): 246-255, 1991

(Available from D. Dwayne Simpson, Texas Christian University, Institute of Behavioral Research, P.O. Box 32880, Fort Worth, TX 76129.)

The use of toxicant inhalants among school-age youth is recognized as a growing and serious problem in the United States. Prevalence estimates of inhalant use show wide geographic differences in both the size and growth of the problem. The common perception is that inhalant use is an especially serious problem among Mexican American youth living in barrios and Native American youth living on reservations. Although inhalant use is considered a problem among poor Mexican American and Native American youth living in areas of the southwest, national and State surveys generally have not shown it to be a greater problem among these minority groups. The exact relationships between ethnic background, socio-economic class, and toxicant inhalant use are not clear at present, but many other factors associated with its use have been noted. More males than females engage in inhalant use, school surveys have shown that inhalant use was associated with poor academic performance and social adjustment in school. Several studies have shown that inhalant use is correlated with negative and inconsistent family interactions, deviant peers, low self-esteem, and poor psychological adjustment. Several etiological, epidemiological, and developmental issues associated with toxicant inhalant use among Mexican

American youth were studied, including reasons that youth believe cause toxicant inhalant use, parental behaviors and influences, the influences of cultural background and acculturation, physical symptoms and psychological distress, and prospective efforts to predict drug use and criminality outcome. Results are pending.

Chemical Manufacturers Warn Inhalants Can Kill

Drug Abuse Update Winter 1991

(Available from National Families in Action, 2296 Henderson Mill Road, Suite 300, Atlanta, GA 30345)

According to the Chemical Specialties Manufacturers Association, inhaling household products is America's hidden drug problem. Statistics from the National Institute on Drug Abuse show that the total number of young people who use inhalants is greater than those who use cocaine. Chemical companies are joining forces with the association to educate young people and discourage use of chemical products. These companies are working to develop aerosol formulas with no abuse potential.

What Many Don't Know Does Hurt Them

Smollen, E.

Employee Assistance: Solutions to the Problems March 1992

(Available from Carroll Smollen, P. O. Box 432, Dayton, OH 45408.)

Inhalant use is the intentional deep breathing of gases from a substance for the effect of obtaining a high. Inhalant use can cause various allergic reactions. Other immediate effects include loss of

feeling in limbs, blurred eyesight, asphyxiation, irregular heartbeat, nausea, amnesia, and brain, lung, nerve, liver, kidney, and bone damage. As the sniffing persists, the body's tolerance weakens and the effects become permanent. Sniffing is hard to control because the substances are sold for legitimate purposes. The Aerosol Education Bureau (AEB) distributes information to youth concerning the dangers of inhalant use, and they are spreading the word to friends. But the problem still exists, across all boundaries, including age.

Inhalants: A Review of Current Literature and Research

Report, November 1991

(Available from DIN Publications, P.O. Box 27568, Tempe, AZ 85285.)

Inhalants include a variety of household and industrial chemicals that are sometimes sniffed for their psychoactive effects. Typically, they fall into three categories: (1) solvents; (2) aerosols; and (3) nitrites. Most inhalants are powerful central nervous system depressants, with effects ranging from dizziness and numbness to nausea and blackout. Nitrous oxide is an anesthetic gas and mild pain reliever, while the nitrites are fast-acting heart stimulants. Concern over products containing butyl nitrite, and research linking it with an AIDS-related cancer, led to a Federal ban on the chemical in 1989. Sniffing remains a persistent element in the American drug abuse picture and is a major problem among Native Americans. According to senior survey data, 18.5 percent of the class of 1990 have used inhalants, compared with 18.2 percent of the

class of 1979. Continued widespread sniffing also is reflected in hospital emergency room data.

Fatal Attraction: "How Huffing Kills"

Redbook, March 1993, pp. 78, 118, 120

This article looks at the increasingly popular youth activity known as huffing--getting high by inhaling the organic solvents used to make aerosol sprays and petroleum products. In just 10 years the number of youth who have used an inhalant has nearly doubled, and more than twice as many high school youth will huff as will use cocaine or LSD. Inhalants are more poisonous to the body than all other drugs combined, and because inhalants are extremely accessible, inexpensive, concealable, and easy to use, more youth are picking up this potentially fatal habit. Case studies are presented, and a listing of "drugs" you may not recognize and warning signs you may miss are included. The International Institute for Inhalant Abuse is listed as a contact for more information.

Drugs and Native-American Youth

Oetting, E. R.; Edwards, R. W.; and Beauvais, F.

In *Perspectives on Adolescent Drug Abuse*, B. Segal, Ed., New York: Haworth Press, Inc., 1989

(Available from E. R. Oetting, Ph.D., Department of Psychology, Colorado State University, Fort Collins, CO 80523.)

Drug use by Native American youth ages 12 to 17 is discussed. Headings within this chapter include: (1) a brief history of epidemiological drug studies, (2) drugs and Native American youth, (3) inhalant use by Indian youth, (4) cultural identification and drug use of Indian youth, (5) emotional distress and drug use of Indian youth, and (6) peer clusters and drug use of Indian youth. It is found that Indian adolescents who live on reservations have high rates of use of marijuana, inhalants, and stimulants. These rates are higher than those found in other American youth although Indian culture does not encourage drug usage. However, it is stressed that susceptibility of Indian youth differs from other adolescents only because of poverty, prejudice, and lack of educational, economic, and social opportunity. 133 Ref.

Groups, Organizations & Programs for Inhalants

Alaska Area Native Health Service

250 Gambell Street
Anchorage, AK 99501
907-257-1380

Center for Substance Abuse Treatment Drug Abuse Information and Treatment Referral Hotline 1-800-662-HELP

Chemical Specialties Manufacturers Association Inhalation Abuse Education Program 1913 I Street, NW Washington, DC 20006

Colorado Inhalant Abuse Program 1060 Bannock Street, Suite 314 Denver, CO 80204 303-623-4234

Eden Childrens' Project 1035 Franklin Avenue East Minneapolis, MN 55404 612-874-9441

Hazelden Educational Materials P.O. Box 176 Center City, MN 55012 1-800-328-9000

International Institute for Inhalant Abuse 799 East Hampden Avenue, Suite 500 Englewood, CO 80110 1-800-832-5090

Johnson Institute 7205 Ohms Lane Minneapolis, MN 55439-2159 1-800-231-5165

Marin Institute for the Prevention of Alcohol and Other Drug Problems 24 Belvedere Street San Rafael, CA 94901 415-456-5692

National Clearinghouse for Alcohol and Drug Information P.O. Box 2345 Rockville, MD 20847-2345 301-468-2600 1-800-729-6686

National Council on Alcoholism and Drug Dependence, Inc. 12 West 21st Street New York, NY 10010 212-206-6770 1-800-NCA-CALL

National Families in Action 2296 Henderson Mills Rd. Suite 300 Atlanta, GA 30345 404-934-6364

Parents' Resource Institute for Drug Education, Inc. (PRIDE) 50 Hurt Plaza, Suite 210 Atlanta, GA 30303 404-577-4500

Solvent Abuse Foundation for Education (SAFE) 750 17th Street, NW Washington, DC 20006 202-332-7233

Texas Prevention Partnership 406 East 11th Street Austin, TX 78701 512-480-8953

Tri-Ethnic Center for Prevention Research Department of Psychology Colorado State University Fort Collins, CO 80523



NCADI

Publications Order Form



National Clearinghouse for
Alcohol and Drug Information
1-800-729-6686 or 301-468-2600
TDD 1-800-487-4889

Alcohol, Tobacco, and Other Drugs Resource Guides

- _____ MS442 AIDS
- _____ MS459 African Americans
- _____ MS449 Alcohol and Other Drug Related Periodicals
- _____ MS419 American Indians/Native Alaskans
- _____ MS408 Asian and Pacific Islander Americans
- _____ MS448 Child Abuse
- _____ MS463 Children of Alcoholics
- _____ MS418 College Youth
- _____ MS460 Community Action
- _____ MS445 Curriculum
- _____ MS421 Elementary Youth
- _____ MS439 Employee Assistance Programs
- _____ MS457 Faith Communities
- _____ MS447 Foundations
- _____ MS441 Hispanic Americans
- _____ MS434 Impaired Driving
- _____ MS450 Intervention
- _____ MS443 Older Americans
- _____ MS461 People with Disabilities
- _____ MS420 Pregnancy: Women, Teenagers, and Their Infants
- _____ MS409 Preschool Children
- _____ MS453 Prevention in the Workplace
- _____ MS416 Rural Communities
- _____ MS423 Secondary School Students
- _____ MS433 Women
- _____ MS451 Violence
- _____ MS446 Youth in Low Income Urban Environments

Other topics you would like to see as Resource Guides:

Do you have any suggestions for making future Resource Guides more useful?

To order, fill out and return to the National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20847-2345 or call 1-800-729-6686. 8.00 a.m. to 8:00 p.m. e.s.t.

Name _____ Title _____

Organization _____

Address _____

City _____ State _____ Zip _____

Telephone (____) _____

**DHHS Publication No. (SMA) 94-2084
Printed 1994**